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UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

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REPLY TO: 3420

DATE: March 23, 1987

SUBJECT: 1986 Survey for Port-Orford-cedar Root Disease (Report No. 87-4)

TO: Forest Supervisors, Klamath, Shasta-Trinity, and Six Rivers NFs

During the summer and fall of 1986, Forest Pest Management and the California Department of Forestry conducted a road-side survey of known Port-Orford-cedar locations on the Klamath, Shasta-Trinity, and Six Rivers National Forests, and on non-federal lands in the vicinity of these National Forests. The objective was to update locations of Port-Orford-cedar root disease, caused by Phytophthora lateralis, from similar surveys conducted in 1980 and in 1984. This memo reports results of the survey, conclusions, and suggestions for future needs.

Maps of known Port-Orford-cedar locations (on file in the Regional Office, San Francisco) provided by National Forest personnel were used. This survey involved driving all accessible roads where the tree species was known to occur and examining dead or dying cedars for evidence of the disease. Additional time was spent surveying drainages away from roads and concentrations of Port-Orford-cedar in areas considered places of likely introduction or spread of the disease from known locations (Grayback Road, Happy Camp Ranger District; Orleans Ranger District; accesses to Siskiyou Wilderness; areas readily accessible to public users) and protected areas or areas being considered for protection (Cedar Basin Research Natural Area, proposed research natural area at Adorni Creek, and Horse Mountain Botanical Area).

Port-Orford-cedar root disease was not found in areas surveyed on or near the Klamath and Shasta-Trinity National Forests. Some dead or dying Port-Orford-cedars were observed at a few locations (Grayback Road on the Klamath National Forest; Graves Creek and Methodist Church Camp on the Shasta-Trinity National Forests), but symptoms were associated with mechanical damage or with tree stress followed by cedar bark beetle (Phloeosinus sp.) or cedar tree borer (Semanothus sp.) attack.

The disease was not found on the Orleans or Lower Trinity Ranger Districts on the Six Rivers National Forest. It had spread from infested areas noted in 1980 and 1984 surveys on the Gasquet Ranger District. In addition to local spread from known locations, the disease was confirmed by isolation at Horse Creek near a trail to the Siskiyou Wilderness on the District. The fungus was not isolated from dead Port-Orford-cedars along Knopki Creek Road.

Since the survey, suspected locations of Port-Orford-cedar root disease have been reported in the town of Orick, along the Grayback Road at the West Branch of Indian Creek, along Highway 299 near the Berry Summit, and near Rattlesnake Hill on the Mt. Shasta Ranger District. The disease has not been confirmed by us at any these locations, or by pathologists from Oregon State University at Orick. To our knowledge, the disease is still confined to the Smith River watershed in Del Norte County.

Mitigating disease management and public education procedures have been implemented on the Gasquet Ranger District, and other Districts in the Region with Port-Orford-cedar are implementing or considering similar procedures. The disease is expected to eventually spread to uninfested areas. If the risk of spread of infested soil is to be minimized, currently infested areas should be known, mapped, and the information made available to users of the forest. This involves a surveillance effort by people on the ground.

When new locations of the disease are suspected by field personnel, a Forest Pest Detection Report Form (R5-3400-1) should be filled out and sent to the Ranger District Port-Orford-cedar coordinator and/or to the District or Forest Silviculturist. If further examination indicates possible P. lateralis infection (characteristic discoloration extending from roots up into root collar; relatively rapid fading of the entire tree crown), the Detection Report should be sent to Forest Pest Management for confirmation and evaluation of the disease.

The final product of this detection effort is expected to be District level maps indicating the distribution of Port-Orford-cedar, the confirmed locations of the disease, and the suspected locations of the disease. The maps need to be kept up-to-date, through monitoring and through cooperation between the Region and the Forests, and will aid with the implementation of management practices that minimize pest impact.

If you have questions or comments please contact John Kliejunas at (415) 556-9083.

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